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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,215	04/29/2002	Kenneth Houlbrook	101159-26406	1002
26511	7590	08/30/2004	[REDACTED]	[REDACTED] EXAMINER PERRIN, JOSEPH L
HIGGS, FLETCHER & MACK LLP 2600 FIRST NATIONAL BANK BUILDING 401 WEST "A" STREET SAN DIEGO, CA 92101-7910			[REDACTED] ART UNIT 1746	[REDACTED] PAPER NUMBER

DATE MAILED: 08/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/088,215	HOULBROOK, KENNETH
	Examiner	Art Unit
	Joseph L. Perrin, Ph.D.	1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17, 19 and 21-22 is/are rejected.
- 7) Claim(s) 1,15 and 20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>20020226</u> .	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

Specification

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).
2. Misnumbered claims 18-21 (see clean version of claims filed in Preliminary Amendment of 21 August 2002) have been renumbered as claims 19-22 as originally filed.

Claim Objections

3. Claims 1 & 15 are objected to because of the following informalities:

In claim 1, the phrase “the use of steam” is objected to because this is not an active method step. The claim is construed as the step of “steaming” and the claims will be examined accordingly. However, appropriate correction is still required.

In claim 15, line 2, the term “to” should be --two--.

4. Claim 20 (misnumbered claim 19) is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to the other claims in

the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-10, 14, 17, 19 & 22 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/03870 to Houlbrook (applicant).

Re claims 1-2 & 17, Houlbrook discloses processing textiles by sequentially or simultaneously washing/cleaning, drying, and/or steaming textiles thereby “effectively de-naturing the HDM allergens” (see entire reference, for instance, page 7, lines 8-32).

Re claims 3-7 & 19, Houlbrook further discloses (for instance, on page 10, lines 4-8) processing the textiles in a tumble drier apparatus, which is also construed to read on a dry cleaning establishment in view of applicant’s disclosure as well as a steaming tunnel (see page 4, third paragraph of applicant’s original disclosure as filed).

Re claims 8-10, Houlbrook further discloses injecting the steam into the tumble drum/drier and steam application (short burst) for 10 seconds (see page 18, lines 20-22 & page 31, claim 5).

Re claim 14, Houlbrook further discloses preheating the textiles (page 7, lines 29-32 & page 16, line 12).

Re claim 22, Houlbrook further discloses steaming the articles while they are at ambient temperature (treated with cold water prior to applying heat, see page 7, lines 8-17).

Recitation of Houlbrook reads on applicant's claimed invention.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 11-13, 15-16, & 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Houlbrook (cited above).

Recitation of Houlbrook is repeated here from above. Re claim 16, it is noted that Houlbrook also discloses "the article or material is heated to at least

60°C" (page 8, line 2). Re 11-13 & 16, Houlbrook does disclose heating the article/material "to a sufficient temperature and for a sufficient time in order to kill a substantial proportion of the HDMs" (bridging paragraph of pages 7-8) but does not expressly disclose optimum time and temperature operating parameters.

Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust treatment times and number of cycles to optimize the killing/de-naturing of HDMs in a textile material, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Re claim 21, the disclosure of Houlbrook recites various steaming apparatus usable for the killing/de-naturing of HDM allergens. One of ordinary skill in the art at the time the invention was made would have found a reasonable expectation of success in applying the claimed steaming treatment method (rejected over Houlbrook above) in various conventional steam treatment apparatuses (including pressing formers) for the purpose of killing/de-naturing HDM allergens in textiles. It is noted that applicant, for instance on page 10, line 14 *et seq.*, admits that the inventive steaming treatment may be used "in conventional treatments where steam is used."

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 6,063,135 to Berndt *et al.*, which discloses a dry cleaning system in conjunction with washing, drying, steaming and ironing;

US 5,827,329 to Champeau, which discloses a dry cleaning system using injected steam treatment;

US 5,219,371 to Shim *et al.*, which discloses a dry cleaning system with steam injection;

US 5,018,371 to Riba, which discloses a steam tunnel finishing system;

US 3,234,571 to Benjamin, which discloses a laundry tumbling machine using steam;

JP 6-173164 to Sumida *et al.*, which discloses steam treating wool for mite resistance;

JP 3-213185 to Omori *et al.*, which discloses sterilizing a mattress via steam treatment.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 7:00-4:30, except alternate Fridays.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph L. Perrin, Ph.D.
Examiner
Art Unit 1746

jlp

